APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/979,540	06/10/2002	Luigi Bella	112740-326	5023

			EXAMINER
29177	7590	06/29/2006	MERED, HABTE

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ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/979,540	BELLA ET AL.
	Examiner	Art Unit	
	Habte Mered	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10 June 2002</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>10-18</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>10-18</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>10 June 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.   Preliminary amendment filed on 6/10/02 has been entered.

2.   Claims 1-9 are cancelled.

3.   Claims 10-18 are pending.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   **Claims 10, 11, and 14-17** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Roginsky et al (US 6, 034, 946), hereinafter referred to as Roginsky,

in view of Lewis et al (US 6, 349, 090), hereinafter referred to as Lewis.

Roginsky teaches a method and system for selecting routing paths in data

communications networks in order to satisfy multiple requirements of which one of the

requirements is cost of the links in the networks.

6.   Regarding **claim 10**, Roginsky discloses a method for assessing routes in a

communications network which includes switching nodes and transmission paths **(See**

Figure 1 and Column 7, Lines 15-25), the method comprising the steps of: assigning

link costs to the transmission paths **(See Figúre 3, Steps 20, 30, and 40 and Column**

8, Lines 32-67); and assessing the routes as a function of the link costs. **(See Figure**

3, step 50 and Column 9, Lines 45-50)

Roginsky fails to expressly disclose that link costs can be amended using the initially assigned link costs.

Lewis teaches traffic routing in a telecommunication network.

Lewis discloses that link costs can be amended using the initially assigned link costs. **(See Figure 3 and Column 4, Lines 24-32 and 52-60)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Roginsky's method to incorporate amending link costs to determine new routes. The motivation being to implement load balancing in the network to respond to the variable nature of data traffic as detailed in Lewis Column 4, Lines 54-56.

7.   Regarding **claim 11**, Roginsky discloses a method for assessing routes in a communications network, wherein the step of forming the amended link costs includes adding randomly selected real numbers to the link costs, with an absolute magnitude of the real numbers being less than a maximum number **(See Column 8, Lines 54-60)**, which is selected to be sufficiently small that the link costs are not substantially changed. **(Figure 3, steps 26, 36, and 46 and Column 11, Lines 60-67)**

8.   Regarding **claim 14**, Roginsky discloses a method for assessing routes in a communications network wherein the communications network assesses relevant routes only for one requested connection. **(See Figure 3, block 10 and Column 8, Line 10)**

9.   Regarding **claim 15**, Roginsky discloses a method for assessing routes in a

communications network, wherein the routes are assessed for each request for a

connection. **(See Figure 3, block 50 and Column 9, Lines 38-39)**

10.   Regarding **claim 16**, Roginsky discloses a method for assessing routes in a

communications network, the method further comprising the step of: setting up a

requested connection in the communications network along a route which is optimum

for the requested connection. **(Column 2, Line 57; Column 11, Lines 15-20; and**

Column 12, Line 20)

11.   Regarding **claim 17**, Roginsky discloses a method for assessing routes in

a communications network, the method further comprising the step of: determining

the route which is optimum for the requested connection by the switching node

(Column 7, Lines 15-25) which processes the request for the connection. . **(See**

also Column 2, Line 57; Column 11, Lines 15-20; and Column 12, Line 20)

12.   Claims **12, 13 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable

over Roginsky in view of Lewis as applied to claim 10 above, and further in view of Le

Boudec et al (US 6, 016, 306), hereinafter referred to as Le Boudec.

13.   Regarding **claims 12 and 13**, the combination of Roginsky and Lewis teaches all

aspects of the claimed invention as set forth in the rejection of claim 10 but does not

disclose a method for assessing routes in a communications network, the method

further comprising the step of: determining an optimum route defined as a function of

the amended link costs via a deterministic routing algorithm wherein the deterministic

routing algorithm is a Dijkstra algorithm.

Le Boudec teaches a routing method based on the well-known Dijkstra theory.

Le Boudec discloses a method for assessing routes in a communications

network, the method further comprising the step of: determining an optimum route

(Column 4, Lines 60-65 and Column 5, Line 15) defined as a function of the amended

link costs via a deterministic routing algorithm wherein the deterministic routing

algorithm is a Dijkstra algorithm. **(Column 2, Lines 57-67 and Column 4, Lines 52-60)**

It would have been obvious to one having ordinary skill in the art at the

time the invention was made to modify the combination of Roginsky's and

Lewis' method to incorporate a deterministic routing algorithm such as

Dijkstra's to determine an optimum route as a function of the cost of the links

in the route. The motivation being use of deterministic routing algorithms

such as Dijkstra's is already built in protocols of widely deployed networks

such as local area networks as further stated by Le Boudec in Column 7, Lines

54-56.

14.   Regarding **claim 18**, the combination of Roginsky and Lewis teaches all aspects

of the claimed invention as set forth in the rejection of claim 10 but does not disclose a

method further comprising the step of: reporting the optimum route for the requested

connection to all the switching nodes along the optimum route for the requested

connection while the requested connection is set up.

Le Boudec discloses a method further comprising the step of: reporting the

optimum route for the requested connection to all the switching nodes along the

optimum route for the requested connection while the requested connection is set up.

(See Column 5, Lines 25-40 and Column 6, Lines 36-45)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Roginsky's and Lewis' method to incorporate reporting the optimum route for the requested connection to all the switching nodes along the optimum route for the requested connection while the requested connection is set up. The motivation being such a reporting mechanism makes the routing methodology compatible with all types of link state protocols and RSVP protocol.

Conclusion

15.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Habte Mered whose telephone number is 571 272 6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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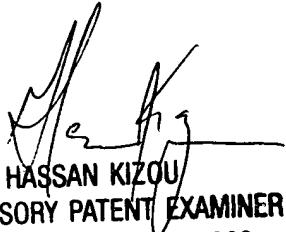
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